



## **"FARM FAIR"**

### **SUGGESTED CLASSROOM STANDARDS GUIDELINES**

#### **Pigs:**

- Science Content Standard 1 – Students, through the inquiry process, demonstrate the ability to design, conduct, evaluate, and communicate results and reasonable conclusions of scientific investigations.
  - Discussed and asked questions about nutrition what's good for pigs
- Science Content Standard 3 – Students, through the inquiry process, demonstrate knowledge of characteristics, structures and function of living things, the process and diversity of life, and how living organisms interact with each other and their environment.
  - How pigs react with their environment, and what pigs need in order to survive, etc.
- Social Studies Content Standard 1 – Students access, synthesize, and evaluates information to communicate and apply social studies knowledge to real world situations.
  - Applied regions, historical developments, etc. to a pigs life
- Social Studies Content Standard 5 – Students make informed decisions based on an understanding of the economic principles of production, distribution, exchange, and consumption.
  - Supply and demand, Cost and profit

#### **Forestry:**

- Science Content Standard 1 – Students, through the inquiry process, demonstrate the ability to design, conduct, evaluate, and communicate results and reasonable conclusions of scientific investigations.
  - Investigate what happens if humans do not take care of environment/forests
- Science Content Standard 5 – Students, through the inquiry process, understand how scientific knowledge and technological developments impact communities, cultures and societies.
  - How developments in technology impact search and rescue and firefighting
- Social Studies Content Standard 1 – Students access, synthesize, and evaluate information to communicate and apply social studies knowledge to real world situations.
  - Apply human interactions with environment
- Social Studies Content Standard 3 – Students apply geographic knowledge and skills (e.g., location, place, human/environment interactions, movement, and regions).
  - Map skills

#### **Potatoes:**

- Science Content Standard 1 – Students, through the inquiry process, demonstrate the ability to design, conduct, evaluate, and communicate results and reasonable conclusions of scientific investigations.
  - How to grow potatoes
- Science Content Standard 3 – Students, through the inquiry process, demonstrate knowledge of characteristics, structures and function of living things, the process and diversity of life, and how living organisms interact with each other and their environment.
  - What potatoes need to grow and how people use potatoes
- Science Content Standard 4 – Students, through the inquiry process, demonstrate knowledge of the composition, structures, processes and interactions of Earth's systems and other objects in space.
  - Minerals in the ground and how they help plants grow

- Science content Standard 5 – Students, through the inquiry process, understand how scientific knowledge and technological developments impact communities, cultures and societies.
  - How technology has changed potato harvesting
- Science Content Standard 6 – Students understand historical developments in science and technology.
  - How technology has changed potato harvesting
- Social Studies Content Standard 1 – Students access, synthesize, and evaluate information to communicate and apply social studies knowledge to real world situations.
  - Regions, supply and demand, production
- Social Studies content Standard 5 – Students make informed decisions based on understanding of the economic principles of production, distribution, exchange, and consumption.
  - Discuss economics with students

#### **Goats:**

- Science Content Standard 3 – Students, through the inquiry process, demonstrate knowledge of characteristics, structures and function of living things, the process and diversity of life, and how living organisms interact with each other and their environment.
  - What a goat needs to live, how people use goats, goat parts
- Social Studies Content Standard 1 – Students access, synthesize, and evaluate information to communicate and apply social studies knowledge to real world situations.
  - Regions, resources, economics
- Social Studies Content Standard 5 – Students make informed decisions based on an understanding of the economic principles of production, distribution, exchanges, and consumption.
  - Products made from goats
- Social Studies Content Standard 6 – Students demonstrate an understanding of the impact of human interaction and cultural diversity on societies
  - Goats use in different countries

#### **Farm Safety:**

- Science Content Standard 5 – Students, through the inquiry process, understand how scientific knowledge and technological developments impact communities, culture and societies.
  - New technology on farms and how to use it safely
- Science Content Standard 6 – Students understand historical developments in science and technology.
  - How technology has changed the equipment used on farms

#### **Dairy Cattle:**

- Math Content Standard 1 – Students engage in the mathematical processes of problem solving and reasoning, estimation, communication, connections and applications, and using appropriate technology.
  - Estimate, problem solving how much milk
- Math Content Standard 2 – Students demonstrate understanding of and an ability to use numbers and operations.
  - Asked kids questions about need and supply had them figure amounts
- Math Content Standard 5 – Students demonstrate understanding of measurable attributes and an ability to use measurement processes.
  - How many gallons of milk produced from one cow – how many from several
- Science Content Standard 3 – Students, through the inquiry process demonstrate knowledge of characteristics, structures and function of living things, the process and diversity of life, and how living organisms interact with each other and their environment.
  - Interactions between cows and people and cows and plants

- Science Content Standard 5 – Students, through the inquiry process, understand how scientific knowledge and technological developments impact communities, cultures and societies.
  - Technology in milking machines
- Social Studies Content Standard 5 – Students make informed decisions based on an understanding of the economic principles of production, distribution, exchange, and consumption.
  - Economics of milk

#### **Crops:**

- Science Content Standard 1 – Students, through the inquiry process, demonstrate the ability to design, conduct, evaluate, and communicate results and reasonable conclusions of scientific investigations.
  - What makes crops grow well
- Science Content Standard 3 – Students, through the inquiry process, demonstrate knowledge of characteristics, structures and function of living things, the process and diversity of life, and how living organisms interact with each other and their environment.
  - Impacts on earth from crops, people and food
- Science Content Standard 4 – Students, through the inquiry process, demonstrate knowledge of the composition structures, processes and interactions of Earth's systems and other objects in space.
  - Seasons, waters cycle growth of plants
- Science Content Standard 5 – Students, through the inquiry process, understand how scientific knowledge and technological developments impact communities, culture and societies.
  - Technological advances in farm equipment and how food is processed
- Science Content Standard 6 – Students understand historical developments in science and technology.
  - Why machinery has changed
- Social Studies Content Standard 5 – Students make informed decisions based on an understanding of the economic principles of production, distribution, exchange, and consumption.
  - Economics and crops
- Social Studies Content Standard 1 – Students access, synthesize and evaluate information to communicate and apply social studies knowledge to real world situations.
  - Regions, what grows where and why
- Social Studies Content Standard 3 – Students apply geographic knowledge and skills (e.g., location, place, human/environment interactions, movement and regions).
  - Regions why things can grow in one place, but not another

#### **Beef Cattle:**

- Math Content Standard 1 – Students engage in the mathematical processes of problem solving and reasoning, estimation, communication, connections and applications, and using appropriate technology.
  - How much of a cow is used
- Math Content Standard 2 – Students demonstrate understanding of and an ability to use numbers and operations.
  - How much of a cow is used
- Math Content Standard 3 – Students use algebraic concepts, processes, and language to model and solve a variety of real-world and mathematical problems.
  - How much of a cow is used
- Science Content Standard 1 – Students, through the inquiry process, demonstrate the ability to design, conduct, evaluate, and communicate results and reasonable conclusions of scientific investigations.
  - Figuring out the entire cow is used

- Science Content Standard 3 – Students, through the inquiry process, demonstrate knowledge of characteristics, structures and function of living things, the process and diversity of life, and how living organisms interact with each other and their environment.
  - Cows, plants, and people
- Social Studies Content Standard 1 – Students access, synthesize, and evaluate information to communicate and apply social studies knowledge to real world situations.
  - Regions, supply and demand transfer of goods
- Social Studies Content Standard 5 – Students make informed decisions based on an understanding of the economic principles of production, distribution, exchange, and consumption.
  - Supply and demand with cattle

#### **Poultry:**

- Math Content Standard 1 – Students engage in the mathematical processes of problem solving and reasoning, estimation, communication, connections and applications, and using appropriate technology
  - Hatching eggs numbers
- Science Content Standard 3 – Students, through the inquiry process, demonstrate knowledge of characteristics, structures and function of living things, the process and diversity of life, and how living organisms interact with each other and their environment.
  - Chickens life cycle and how eggs are made, types of chickens, food cycle
- Social Studies Content Standard 1 – Students access, synthesize, and evaluate information to communicate and apply social studies knowledge to real world situations.
  - Economics
- Social Studies Content Standard 5 – Students make informed decisions based on an understanding of the economic principles of production, distribution, exchange, and consumption.
  - Egg and chicken economics

#### **Pleasure Horses:**

- Science Content Standard 3 – Students, through the inquiry process, demonstrate knowledge of characteristics, structures and function of living things, the process and diversity of life, and how living organisms interact with each other and their environment.
  - How horses help people
- Social Studies Content Standard 1 – Students access, synthesize, and evaluate information to communicate and apply social studies knowledge to real world situations.
  - How people have used horses over time
- Social Studies Content Standard 4 – Students demonstrate an understanding of the effects of time, continuity, and change of historical and future perspectives and relationships.
  - Horses being a form of transportation and how that and the way people communicate has changed over time

#### **Wheat Production-Wheat Montana:**

- Math Content Standard 1 – Students engage in the mathematical processes of problem solving and reasoning, estimation, communication, connections and applications, and using appropriate technology.
  - How much wheat is produced
- Math Content Standard 2 – Students demonstrate understanding of and an ability to use numbers and operations.
  - How much wheat is produced
- Math Content Standard 3 – Students use algebraic concepts, processes, and language to model and solve a variety of real-world and mathematical problems.
  - How many things can be made from x amount of wheat

- Math Content Standard 5 – Students demonstrate understanding of measurable attributes and an ability to use measurement processes.
  - Measure wheat
- Science Content Standard 1 – Students, through the inquiry process, demonstrate the ability to design, conduct, evaluate, and communicate results and reasonable conclusions of scientific investigations.
  - How wheat can be used
- Science Content Standard 3 – Students, through the inquiry process, demonstrate knowledge of characteristics, structures and function of living things, the process and diversity of life, and how living organisms interact with each other and their environment.
  - Parts of wheat
- Science Content Standard 5 – Students, through the inquiry process, understands how scientific knowledge and technological developments impact communities, cultures and societies.
  - Harvesting wheat and processing
- Science Content Standard 6 – Students understand historical developments in science and technology.
  - Harvest and processing
- Social Studies Content Standard 1 – Students access, synthesize, and evaluate information to communicate and apply social studies knowledge to real world situations.
  - Regions and weather applied to growing crops
- Social Studies Content Standard 3 – Students apply geographic knowledge and skills (e.g., location, place, human/environment interactions, movement, and regions),
  - Why wheat grows well in Montana
- Social Studies Content Standard 5 – Students make informed decisions based on an understanding of the economic principles of production, distribution, exchange, and consumption.
  - Supply and demand cost etc.

#### **Water Cycle:**

- Math Content Standard 1 – Students engage in the mathematical processes of problem solving and reasoning, estimation, communication, connections and applications, and using appropriate technology.
  - How long does it take for
- Math content Standard 2 – Students demonstrate understanding of and an ability to use numbers and operations.
  - How long does it take for
- Math content Standard 3 – Students use algebraic concepts, processes, and language to model and solve a variety of real-world and mathematical problems.
  - How long does it take for
- Science Content Standard 1 – Students, through the inquiry process, demonstrate the ability to design, conduct, evaluate, and communicate results and reasonable conclusions of scientific investigations.
  - What happens when ground gets polluted
- Science Content Standard 2 – Students, through the inquiry process, demonstrate knowledge of properties, forms, changes and interactions of physical and chemical systems.
  - Pollution
- Science Content Standard 3 – Students, through the inquiry process, demonstrate knowledge of characteristics, structures and function of living things, the process and diversity of life, and how living organisms interact with each other and their environment.
  - How humans change environment with irrigation, water, and sewer systems

- Science Content Standard 4 – Students, through the inquiry process, demonstrate knowledge of the composition, structures, processes and interactions of Earth’s systems and other objects in space.
  - Water cycle
- Social Studies Content Standard 1 – Students access, synthesize, and evaluate information to communicate and apply social studies knowledge to real world situations.
  - Regions

#### **Sheep:**

- Science Content Standard 3 – Students, through the inquiry process, demonstrate knowledge of characteristics, structures and function of living things, the process and diversity of life, and how living organisms interact with each other and their environment.
  - Humans and sheep
- Social Studies Content Standard 1 – Students access, synthesize, and evaluate information to communicate and apply social studies knowledge to real world situations.
  - How clothes are made
- Social Studies Content Standard 4 – Students demonstrate an understanding of the effects of time, continuity, and change on historical and future perspectives and relationships.
  - How people trade and have used wool
- Social Studies Content Standard 5 – Students make informed decisions based on an understanding of the economic principles of production, distribution, exchange, and consumption.
  - Wool distribution

#### **Weeds:**

- Science Content Standard 1 – Students, through the inquiry process, demonstrate the ability to design, conduct, evaluate, and communicate results and reasonable conclusions of scientific investigations.
  - What happens when seed spread
- Science Content Standard 2 – Students, through the inquiry process, demonstrate knowledge of properties, forms, changes and interactions of physical and chemical systems.
  - When and how weeds spread
- Science Content Standard 3 – Students, through the inquiry process, demonstrate knowledge of characteristics, structures and function of living things, the process and diversity of life, and how living organisms interact with each other and their environment.
  - Weeds and pesticides – Why weeds impact other plants
- Social Studies Content Standard 1 – Students access, synthesize, and evaluate information to communicate and apply social studies knowledge to real-world situations.
  - Why people need to stop the spread of noxious weeds
- Social Studies Content Standard 3 – Students apply geographic knowledge and skills (e.g., location, place, human/environment interactions, movement, and regions).
  - Why weeds grow better in some places

#### **Soils:**

- Science Content Standard 1 – Students, through the inquiry process, demonstrate the ability to design, conduct, evaluate, and communicate results and reasonable conclusions of scientific investigations.
  - Water and soil experiment/demonstration
- Science Content Standard 5 – Students, through the inquiry process, understand how scientific knowledge and technological developments impact communities, culture and societies.
  - Impact people have on land

- Social Studies Content Standard 1 – Students access, synthesize, and evaluate information to communicate and apply social studies knowledge to real-world situations.
  - Minerals in soils, resources, soils and water
- Social Studies Content Standard 3 – Students apply geographic knowledge and skills (e.g., location, place, human/environment interactions, movement, and regions).
  - Different soils in different area

#### **Diary Processing – ice cream making:**

- Math Content Standard 1 – Students engage in the mathematical processes of problem solving and reasoning, estimation, communication, connections and applications, and using appropriate technology.
  - Estimate the temperature at which salt water freezes
- Math Content Standard 2 – Students demonstrate understanding of and an ability to use numbers and operations.
  - Use addition to measure
- Math Content Standard 3 – Students use algebraic concepts, processes, and language to model and solve a variety of real-world and mathematical problems.
  - Figure out what you need to do to get x of you have y
- Math Content Standard 5 – Students demonstrate understanding of measurable attributes and an ability to use measurement processes.
  - Measure all ingredients
- Science Content Standard 1 – Students, through the inquiry process, demonstrate the ability to design, conduct, evaluate, and communicate results and reasonable conclusions of scientific investigations.
  - Ice Cream lab
- Science Content Standard 2 – Students, through the inquiry process, demonstrate knowledge of properties, forms, changes and interactions of physical and chemical systems.
  - Physical vs. Chemical changes, freezing point
- Science Content Standard 5 – Students, through the inquiry process, understand how scientific knowledge and technological developments impact communities, cultures and societies.
  - Technology doesn't take as long as doing it by hand
- Science Content Standard 6 – Students understand historical developments in science and technology.
- Social Studies Content Standard 4 – Students demonstrate an understanding of the effects of time, continuity, and change on historical and future perspectives and relationships.
  - Time and how people get things
  - How technology has changed

#### **Wagon Ride:**

- Science Content Standard 5 – Students, through the inquiry process, understand how scientific knowledge and technological developments impact communities, cultures and societies.
  - Discuss the way technology has changed farm life
- Science Content Standard 6 – Students understand historical developments in science and technology.
  - Important technological development in agriculture
- Social Studies Content Standard 3 – Students apply geographic knowledge and skills (e.g., location, place, human/environment shapes what we can do)
  - Regions, how environment shapes what we can do
- Social Studies Content Standard 4 – Students demonstrate an understanding of the effects of time, continuity, and change on historical and future perspectives and relationships.
  - What farm life used to be like